COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, DECEMBER 27, 2018

STO-CLERK'S OFFICE INT CONTROL CENTER 2018 CEC 27 A 11: 10

PETITION OF

APPALACHIAN POWER COMPANY

CASE NO. PUR-2018-00198

For approval of a plan for electric distribution grid transformation projects pursuant to § 56-585.1 A 6 of the Code of Virginia

ORDER FOR NOTICE AND HEARING

On December 14, 2018, Appalachian Power Company ("APCo" or "Company") filed a petition with the State Corporation Commission ("Commission") for approval of a plan for electric distribution grid transformation projects ("Petition") pursuant to § 56-585.1 A 6 ("Subsection A 6") of the Code of Virginia ("Code"). Specifically, APCo seeks approval of a three-year¹ Electric Distribution Grid Transformation Plan ("GT Plan") that includes "measures to facilitate integration of distributed energy resources and measures to enhance physical electric distribution grid reliability and security" as required by Subsection A 6.² The estimated total proposed investment associated with APCo's GT Plan is approximately \$415.4 million in capital investment and \$26.3 million in operations and maintenance investment.³ Pursuant to Subsection A 6, the Commission is required to issue its final order on the Petition within six months of the filing date.

The Company states that APCo's three-year GT Plan is not a material departure from the Company's current distribution investment strategy, and APCo proposes to incorporate into its

¹ Pre-filed Direct Testimony of William K. Castle ("Castle Direct") at 2.

² Petition at 2.

³ Pre-filed Direct Testimony of Brian T. Martin at 19.

GT Plan the Company's existing program of replacing distribution assets that are near or at the end of their useful lives with infrastructure that facilitates the integration of distributed energy resources ("DER") or enhances the reliability and security of the distribution grid.⁴

The Company states that its proposed GT Plan includes the following: (i) continued replacement of Automated Meter Reading equipment ("AMR"), which has reached the end of its useful life, with Advanced Metering Infrastructure ("AMI"); (ii) Asset Improvement Project; (iii) Grid Automation Project; (iv) Vegetation Management; and (v) Distribution Grid Security and Cyber Security Projects.⁵ The Company states that, in compliance with Subsection A 6, the AMI and grid automation measures facilitate the integration of DER; the GT Plan includes investments in physical security to enhance grid security; and all elements of the GT Plan enhance grid reliability.⁶

The Company states that, unlike AMR, AMI enables two-way communication, which would allow faster and more efficient restoration in the event of outages; helps the Company to proactively identify, and repair, problem circuits; better assimilates rapidly expanding technologies such as DER; and enables programs to enhance customer service. The Company further states that AMR meters that are currently in place are no longer supported by the industry and would require additional costly investment in data readers to replace the current AMR meters with new AMR meters. According to the Company, AMI is a proven technology whose

⁴ Petition at 1.

⁵ Id. at 3-5.

⁶ Castle Direct at 3.

⁷ Petition at 3.

^{8 1}d.

costs are declining.⁹ The Company states that it began the transition from AMR to AMI in 2017 and anticipates the replacement of 167,000 meters by the end of 2018, 264,000 meters in 2019, and the remaining meters throughout its Virginia service territory by the end of 2022.¹⁰

The Company's proposed Asset Improvement Project would involve replacing aging distribution line and distribution substation equipment along with re-engineering facilities to make them less susceptible to the impacts of weather. According to the Company, replacing and upgrading this equipment is necessary to take advantage of technological improvements, improve reliability and power quality for customers, and enable customer-owned DER interconnections to the grid. 12

The Application states the proposed Grid Automation Project would involve installing automated control systems for the Company's electric distribution circuits and substations, which would improve system resiliency by significantly reducing the duration of outages and limiting sustained outages to smaller numbers of customers, compared to manual recovery efforts. The Company states this project would enhance the Company's ability to gather real-time information about its distribution grid system and assets and would also improve the Company's control of grid components as the number of customer-owned DER connected to the grid grows. The Company states that the "automated control systems for electric distribution circuits and

⁹ Id.

¹⁰ Id.

¹¹ Id. at 4.

¹² Id.

¹³ Id.

¹⁴ Id.

substations" and "intelligent grid devices" are specifically listed as "electric distribution grid transformation" projects in the Code. 15

The Application states that APCo's Vegetation Management program is included as a project in the proposed GT Plan, as the Company's "vegetation management efforts are critical to enhancing the reliability of [APCo's] grid."¹⁶ Lastly, the Company states that the Distribution Grid Security and Cyber Security Projects "are essential to protecting the Company's grid from physical and cyber attacks and will help [APCo] maintain compliance with extensive and rigorous mandatory cyber security requirements."¹⁷

The Company asserts that its GT Plan is reasonable, prudent, and in the public interest, as it represents prudent utility planning and allows the Company to modernize its grid and improve its overall service to customers.¹⁸ The Company further asserts that the projected costs of the GT Plan are reasonable and prudent, as the Company's procurement process is well-established and closely monitored to ensure cost competitiveness, and the projected costs are based in large part on costs APCo has already incurred.¹⁹

NOW THE COMMISSION, upon consideration of this matter, is of the opinion and finds that the Company should provide public notice of its Petition; a public hearing should be scheduled for the purpose of receiving testimony and evidence on the Company's Petition; a procedural schedule should be established to allow interested persons an opportunity to file

¹⁵ Id. See Code § 56-576.

¹⁶ Petition at 5.

¹⁷ Id.

¹⁸ Id.

¹⁹ Id. at 6.

written or electronic comments on the Company's Petition or to participate in this proceeding as a respondent; and the Commission's Staff ("Staff") should be directed to investigate the Petition and file testimony and exhibits containing its findings and recommendations. Further, we find that a Hearing Examiner should be appointed to rule on all discovery matters that arise during the course of this proceeding.

Accordingly, IT IS ORDERED THAT:

- (1) This matter is docketed and assigned Case No. PUR-2018-00198.
- (2) As provided by § 12.1-31 of the Code and 5 VAC 5-20-120, *Procedure before*Hearing Examiners, of the Commission's Rules of Practice and Procedure ("Rules of Practice"),
 a Hearing Examiner is appointed to rule on any discovery matters that may arise during the
 course of this proceeding, including any motions related to the protective treatment of
 confidential information.
- (3) A public hearing on the Petition shall be convened at 10 a.m. on April 23, 2019, in the Commission's second floor courtroom located in the Tyler Building, 1300 East Main Street, Richmond, Virginia 23219, to receive the testimony of public witnesses and the evidence of the Company, any respondents, and the Staff. Any person desiring to offer testimony as a public witness at this hearing should appear in the Commission's courtroom fifteen (15) minutes prior to the starting time of the hearing and identify himself or herself to the Commission's Bailiff.
- (4) The Company shall make a copy of its Petition, as well as a copy of this Order for Notice and Hearing, available for public inspection during regular business hours at each of the Company's business offices in the Commonwealth of Virginia. A copy also may be obtained by submitting a written request to counsel for the Company, Noelle J. Coates, Esquire, American Electric Power Service Corporation, 1051 East Cary Street, Suite 1100, Richmond, Virginia 23219. If acceptable to the requesting party, the Company may provide the documents by

electronic means. Copies of public versions of all documents filed in this case also shall be available for interested persons to review in the Commission's Document Control Center located on the first floor of the Tyler Building, 1300 East Main Street, Richmond, Virginia 23219, between the hours of 8:15 a.m. and 5 p.m., Monday through Friday, excluding holidays. Interested persons also may download unofficial copies from the Commission's website: http://www.scc.virginia.gov/case.

(5) On or before January 11, 2019, the Company shall cause the following notice to be published as display advertising (not classified) on one occasion in newspapers of general circulation throughout the Company's Virginia service territory:

NOTICE TO THE PUBLIC OF PETITION
OF APPALACHIAN POWER COMPANY FOR APPROVAL OF
A PLAN FOR ELECTRIC DISTRIBUTION GRID
TRANSFORMATION PROJECTS PURSUANT TO
§ 56-585.1 A 6 OF THE CODE OF VIRGINIA
CASE NO. PUR-2018-00198

On December 14, 2018, Appalachian Power Company ("APCo" or "Company") filed a petition with the State Corporation Commission ("Commission") for approval of a plan for electric distribution grid transformation projects ("Petition") pursuant to § 56-585.1 A 6 ("Subsection A 6") of the Code of Virginia ("Code"). Specifically, APCo seeks approval of a three-year Electric Distribution Grid Transformation Plan ("GT Plan") that includes "measures to facilitate integration of distributed energy resources and measures to enhance physical electric distribution grid reliability and security" as required by Subsection A 6. The estimated total proposed investment associated with APCo's GT Plan is approximately \$415.4 million in capital investment and \$26.3 million in operations and maintenance investment. Pursuant to Subsection A 6, the Commission is required to issue its final order on the Petition within six months of the filing date.

The Company states that APCo's three-year GT Plan is not a material departure from the Company's current distribution investment strategy, and APCo is proposing to incorporate into its GT Plan the Company's existing program of replacing distribution assets that are near or at the end of their useful lives with infrastructure that facilitates the integration of distributed energy

resources ("DER") or enhances the reliability and security of the distribution grid.

The Company states that its proposed GT Plan includes the following: (i) continued replacement of Automated Meter Reading equipment ("AMR"), which has reached the end of its useful life, with Advanced Metering Infrastructure ("AMI"); (ii) Asset Improvement Project; (iii) Grid Automation Project; (iv) Vegetation Management; and (v) Distribution Grid Security and Cyber Security Projects. The Company states that, in compliance with Subsection A 6, the AMI and grid automation measures facilitate the integration of DER; the GT Plan includes investments in physical security to enhance grid security; and all elements of the GT Plan enhance grid reliability.

The Company states that, unlike AMR, AMI enables two-way communication, which would allow faster and more efficient restoration in the event of outages; helps the Company to proactively identify, and repair, problem circuits; better assimilates rapidly expanding technologies such as DER; and enables programs to enhance customer service. The Company further states that AMR meters that are currently in place are no longer supported by the industry and would require additional costly investment in data readers to replace the current AMR meters with new AMR meters. According to the Company, AMI is a proven technology whose costs are declining. The Company states that it began the transition from AMR to AMI in 2017 and anticipates the replacement of 167,000 meters by the end of 2018, 264,000 meters in 2019, and the remaining meters throughout its Virginia service territory by the end of 2022.

The Company's proposed Asset Improvement Project would involve replacing aging distribution line and distribution substation equipment along with re-engineering facilities to make them less susceptible to the impacts of weather. According to the Company, replacing and upgrading this equipment is necessary to take advantage of technological improvements, improve reliability and power quality for customers, and enable customer-owned DER interconnections to the grid.

The Application states the proposed Grid Automation Project would involve installing automated control systems for the Company's electric distribution circuits and substations, which would improve system resiliency by significantly reducing the duration of outages and limiting sustained outages to smaller numbers of customers, compared to manual recovery efforts. The Company states this project would enhance the Company's ability

to gather real-time information about its distribution grid system and assets and would also improve the Company's control of grid components as the number of customer-owned DER connected to the grid grows. The Company states that the "automated control systems for electric distribution circuits and substations" and "intelligent grid devices" are specifically listed as "electric distribution grid transformation" projects in the Code.

The Application states that APCo's Vegetation Management program is included as a project in the proposed GT Plan, as the Company's "vegetation management efforts are critical to enhancing the reliability of [APCo's] grid." Lastly, the Company states that the Distribution Grid Security and Cyber Security Projects "are essential to protecting the Company's grid from physical and cyber attacks and will help [APCo] maintain compliance with extensive and rigorous mandatory cyber security requirements."

The Company asserts that its GT Plan is reasonable, prudent, and in the public interest, as it represents prudent utility planning and allows the Company to modernize its grid and improve its overall service to customers. The Company further asserts that the projected costs of the GT Plan are reasonable and prudent, as the Company's procurement process is well-established and closely monitored to ensure cost competitiveness, and the projected costs are based in large part on costs APCo has already incurred.

The Commission entered an Order for Notice and Hearing in this case that, among other things, scheduled a public hearing at 10 a.m. on April 23, 2019, in the Commission's second floor courtroom located in the Tyler Building, 1300 East Main Street, Richmond, Virginia 23219, to receive the testimony of public witnesses and the evidence of the Company, any respondents, and the Staff. Any person desiring to testify as a public witness should appear at the hearing location fifteen (15) minutes prior to the starting time of the hearing and contact the Commission's Bailiff.

The Company's Petition and the Commission's Order for Notice and Hearing are available for public inspection during regular business hours at each of the Company's business offices in the Commonwealth of Virginia. Copies also may be obtained by submitting a written request to counsel for the Company, Noelle J. Coates, Esquire, American Electric Power Service Corporation, 1051 East Cary Street, Suite 1100, Richmond, Virginia 23219. If acceptable to the requesting party, the Company may provide the documents by electronic means.

Copies of the Petition and other documents filed in this case are also available for interested persons to review in the Commission's Document Control Center located on the first floor of the Tyler Building, 1300 East Main Street, Richmond, Virginia 23219, between the hours of 8:15 a.m. and 5 p.m., Monday through Friday, excluding holidays. Interested persons also may download unofficial copies from the Commission's website: http://www.scc.virginia.gov/case.

On or before April 16, 2019, any interested person wishing to comment on the Company's Petition shall file written comments with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218-2118. Any interested person desiring to file comments electronically may do so on or before April 16, 2019, by following the instructions on the Commission's website: http://www.scc.virginia.gov/case. Compact disks or any other form of electronic storage medium may not be filed with the comments. All such comments shall refer to Case No. PUR-2018-00198.

On or before February 7, 2019, any person or entity may participate as a respondent in this proceeding by filing a notice of participation. If not filed electronically, an original and fifteen (15) copies of the notice of participation shall be submitted to the Clerk of the Commission at the address above. A copy of the notice of participation as a respondent also must be sent to counsel for the Company at the address set forth above. Pursuant to Rule 5 VAC 5-20-80 B, Participation as a respondent, of the Commission's Rules of Practice and Procedure ("Rules of Practice"), any notice of participation shall set forth: (i) a precise statement of the interest of the respondent; (ii) a statement of the specific action sought to the extent then known; and (iii) the factual and legal basis for the action. Any organization, corporation, or government body participating as a respondent must be represented by counsel as required by Rule 5 VAC 5-20-30, Counsel, of the Rules of Practice. All filings shall refer to Case No. PUR-2018-00198. For additional information about participation as a respondent, any person or entity should obtain a copy of the Commission's Order for Notice and Hearing.

All documents filed with the Office of the Clerk of the Commission in this docket may use both sides of the paper. In all other respects, all filings shall comply fully with the requirements of 5 VAC 5-20-150, *Copies and format*, of the Commission's Rules of Practice.

The Commission's Rules of Practice may be viewed at http://www.scc.virginia.gov/case. A printed copy of the Commission's Rules of Practice and an official copy of the Commission's Order for Notice and Hearing in this proceeding may be obtained from the Clerk of the Commission at the address above.

APPALACHIAN POWER COMPANY

- (6) On or before January 11, 2019, the Company shall serve a copy of this Order for Notice and Hearing on the following officials, to the extent the position exists, in each county, city, and town in which the Company provides service in the Commonwealth of Virginia: the chairman of the board of supervisors of each county; the mayor or manager (or equivalent official) of every city and town; and the county, city, or town attorney. Service shall be made by either personal delivery or first class mail to the customary place of business or residence of the person served.
- (7) On or before January 25, 2019, the Company shall file with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218-2118, proof of the notice and service required by Ordering Paragraphs (5) and (6), including the name, title, and address of each official served.
- (8) On or before April 16, 2019, any interested person may file written comments on the Petition with the Clerk of the Commission at the address shown in Ordering Paragraph (7). Any interested person desiring to submit comments electronically may do so on or before April 16, 2019, by following the instructions found on the Commission's website:

 http://www.scc.virginia.gov/case. Compact disks or any other form of electronic storage medium may not be filed with the comments. All comments shall refer to Case No. PUR-2018-00198.

- (9) On or before February 7, 2019, any person or entity wishing to participate as a respondent in this proceeding may do so by filing a notice of participation. If not filed electronically, an original and fifteen (15) copies of the notice of participation shall be submitted to the Clerk of the Commission at the address set forth in Ordering Paragraph (7). The respondent simultaneously shall serve a copy of the notice of participation on counsel to the Company at the address in Ordering Paragraph (4). Pursuant to Rule 5 VAC 5-20-80 B, *Participation as a respondent*, of the Commission's Rules of Practice, any notice of participation shall set forth: (i) a precise statement of the interest of the respondent; (ii) a statement of the specific action sought to the extent then known; and (iii) the factual and legal basis for the action. Any organization, corporation, or government body participating as a respondent must be represented by counsel as required by 5 VAC 5-20-30, *Counsel*, of the Rules of Practice. All filings shall refer to Case No. PUR-2018-00198.
- (10) Within five (5) business days of receipt of a notice of participation as a respondent, the Company shall serve upon each respondent a copy of this Order for Notice and Hearing, a copy of the Petition, and a copy of the public version of all materials filed by the Company with the Commission, unless these materials already have been provided to the respondent.
- (11) On or before March 12, 2019, each respondent may file with the Clerk of the Commission, and serve on the Staff, the Company, and all other respondents, any testimony and exhibits by which the respondent expects to establish its case, and each witness's testimony shall include a summary not to exceed one page. If not filed electronically, an original and fifteen (15) copies of such testimony and exhibits shall be submitted to the Clerk of the Commission at the address set forth in Ordering Paragraph (7). In all filings, respondents shall comply with the Commission's Rules of Practice, including: 5 VAC 5-20-140, *Filing and service*, and

5 VAC 5-20-240, *Prepared testimony and exhibits*. All filings shall refer to Case No. PUR-2018-00198.

- (12) On or before March 26, 2019, the Staff shall investigate the Petition and shall file with the Clerk of the Commission an original and fifteen (15) copies of its testimony and exhibits, and each Staff witness's testimony shall include a summary not to exceed one page. The Staff shall serve a copy thereof on counsel to APCo and all respondents.
- (13) On or before April 9, 2019, APCo shall file with the Clerk of the Commission:

 (a) any rebuttal testimony and exhibits that it expects to offer, and each rebuttal witness's testimony shall include a summary not to exceed one page; and (b) a summary not to exceed one page of each direct witness's testimony if not previously included therewith. The Company simultaneously shall serve a copy of the testimony and exhibits on the Staff and all respondents. If not filed electronically, an original and fifteen (15) copies of such rebuttal testimony and exhibits shall be submitted to the Clerk of the Commission at the address set forth in Ordering Paragraph (7).
- (14) All documents filed with the Office of the Clerk of the Commission in this docket may use both sides of the paper. In all other respects, all filings shall comply fully with the requirements of 5 VAC 5-20-150, *Copies and format*, of the Commission's Rules of Practice.
- (15) The Commission's Rule of Practice 5 VAC 5-20-260, *Interrogatories or requests* for production of documents and things, shall be modified for this proceeding as follows: responses and objections to written interrogatories and requests for production of documents shall be served within five (5) calendar days after receipt of the same. In addition to the service requirements of Rule of Practice 5 VAC 5-20-260, on the day that copies are filed with the Clerk of the Commission, a copy of the interrogatory or request for production shall be served electronically, or by facsimile, on the party to whom the interrogatory or request for production

is directed or the assigned Staff attorney if the interrogatory or request for production is directed to the Staff.²⁰ Except as modified above, discovery shall be in accordance with Part IV of the Commission's Rules of Practice, 5 VAC 5-20-240 *et seq*.

(16) This matter is continued.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to:

Noelle J. Coates, Esquire, American Electric Power Service Corporation, 1051 East Cary Street,
Suite 1100, Richmond, Virginia 23219; James R. Bacha, Esquire, American Electric Power

Service Corporation, 1 Riverside Plaza, Columbus, Ohio 43215; Timothy E. Biller, Esquire,
Hunton Andrews Kurth LLP, 951 East Byrd Street, Richmond, Virginia 23219; and
C. Meade Browder, Jr., Senior Assistant Attorney General, Division of Consumer Counsel,
Office of the Attorney General, 202 N. 9th Street, 8th Floor, Richmond, Virginia 23219. A copy
also shall be delivered to the Commission's Office of General Counsel and Divisions of Public
Utility Regulation and Utility Accounting and Finance.

²⁰ The assigned Staff attorney is identified on the Commission's website, http://www.scc.virginia.gov/case, by clicking "Docket Search," and clicking "Search Cases," and entering Case Number PUR-2018-00198 in the appropriate box.